Harvester head

461 LF, 561 LF, 661 LF & 761 LF

EcoLog®
Forestry of tomorrow

Eco Log 461 LF

- Thinning expert in every situation

The rapid feed, high performance and versatile design make the Eco Log 461 LF the obvious choice for all types of thinning. The harvester head, which can get to even the most hard-to-reach areas, easily handles dense initial thinning thanks to its low weight and compact dimensions. At the same time, the patented LogHold solution and the proportionally angled feed rollers provide the best possible gripping in large-diameter stands.

The Eco Log 461 LF has been designed according to the low-friction concept (LF), which guarantees maximum production and profitability thanks to minimum friction, optimum energy consumption and low maintenance costs.

Experience an impressive combination of high performance and flexibility with the Eco Log 461 LF, a small harvester head with a large capacity.

Lightweight, versatile and efficient

ECO LOG 461 LF – ALL IN ONE

With its low weight, versatile design and efficient handling in confined areas, the EC 461 LF offers all the properties you need for productive and profitable thinning.

PEAK CAPACITY

The EC 461 LF reaches its absolute peak capacity in stands with a BHD ranging from 8–35 cm, although the LF concept means that it can also handle larger-diameter stems effectively.

Specifications

EC 461 LF

Feeding	
Proportional roller clamping pressure in relation to stem diameter, as well as individual setting by tree species for optimum performance.	
Roller motors:	398 cc
Max. roller opening:	420 mm
Feed rate:	5,5 m/s
Feed force:	18 kN
Proportional pressures:	Yes
Cutting	
SuperCut 100 is an extremely powerful unit with integrated chain lubrication and hydraulic tensioning of the chain. In combination with Eco Log Saw Control, the cutting time is optimized and the risk of cutting cracks is minimized.	
Cutting diameter:	530 mm
Chain speed:	40 m/s
Saw motor:	Bucher 20 cc
Saw unit:	Automatic – SuperCut 100
Saw Control:	Yes
Delimbing	
Proportional delimbing knife pressure in relation to stem diameter for minimum friction and maximum production. Individual setting of upper/lower knife/knives and by tree species for optimum performance.	
Floating knives:	4 incl. top knife
Fixed knives:	1
Delimbing diameter tip-tip:	350 mm
Min. limb diameter:	30 mm
Proportional pressures:	Yes
LogHold:	Yes

Weight and dimensions	
Thanks to its extremely compact dimensions and low weight, the Eco Log 461 LF is ideal for thinning in dense stands.	
Width closed:	850 mm
Width open:	1130 mm
Height:	1230 mm
Weight:	726 kg
Recommendations	
Base machines	
The Eco Log 461 LF is ideal for installation on Eco Log's harvesters 1058, 550 & 560.	
Felling	
Proportional roller clamping pressure in relation to stem diameter, as well as individual setting by tree species for optimum performance.	
Recommended stem diameter (BHD) for maximum productivity*:	8–35 cm

* Breast height diameter, measured 1.3 m up the stem.

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Eco Log 561 LF

- All-round harvester head for all jobs

The Eco Log 561 LF is a high-production all--round harvester head, designed to handle the various tasks within forestry efficiently – everything from thinning low-grade timber to basic final felling.

The low-friction concept (LF) ensures maximum productivity, durability and profitability thanks to the fact that it minimizes friction, wear, and maintenance requirements.

The harvester head's compact dimensions, combined with perfect delimbing down to 30 mm, allow the thinning of low-grade timber to be carried out quickly and efficiently with the highest quality. Three smart patents – LogHold, proportionally angled feed rollers and Eco Log Saw Control – produce a harvester head boasting impressive stem holding, strength and maximum production.

Versatile and compact

CAN COPE WITH MOST THINGS

Compact and versatile for thinning or strong and powerful for final felling? With the EC 561 LF at the tip of your crane, you don't have to choose. Instead, you get features that allow you to handle most situations with the highest levels of productivity and profitability.

PEAK CAPACITY

The EC 561 LF reaches its absolute peak capacity with stems with a BHD ranging from 12–43 cm, although the LF concept means that it can also handle larger-diameter stems effectively.

Specifications

EC 561 LF

Feeding	
Proportional roller clamping pressure in relation to stem diameter, as well as individual setting by tree species for optimum performance.	
Roller motors:	514 or 560 cc
Max. roller opening:	500 mm
Feed rate:	Roller motor 514 cc = 6.0 m/s Roller motor 560 cc = 5.5 m/s
Feed force:	22 kN / 24 kN
Proportional pressures:	Yes
Cutting	
SuperCut 100 is an extremely powerful unit with integrated chain lubrication and hydraulic tensioning of the chain. In combination with Eco Log Saw Control, the cutting time is optimized and the risk of cutting cracks is minimized.	
Cutting diameter:	600 mm
Chain speed:	40 m/s
Saw motor:	Bucher 20 cc
Saw unit:	Automatic – SuperCut 100
Saw Control:	Yes
Delimbing	
Proportional delimbing knife pressure in relation to stem diameter for minimum friction and maximum production. Individual setting of upper/lower knife/knives and by tree species for optimum performance.	
Floating knives:	5 incl. top knife
Fixed knives:	1
Delimbing diameter tip-tip:	430 mm
Min. limb diameter:	30 mm
Proportional pressures:	Yes
LogHold:	Yes
Separate knife control:	Yes

Weight and dimensions	
With its compact dimensions and very low weight in relation to its high capacity, the EC 561 LF is ideal for a variety of felling operations.	
Width closed:	900 mm
Width open:	1500 mm
Height:	1500 mm
Weight:	980 kg
Recommendations	
Base machines	
The EC 561 LF is ideal for installation on Eco Log's harvesters 560, 580 & 688.	
Felling	
Proportional roller clamping pressure in relation to stem diameter, as well as individual setting by tree species for optimum performance.	
Recommended stem diameter (BHD) for maximum productivity*:	12–43 cm

* Breast height diameter, measured 1.3 m up the stem.

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Eco Log 661 LF

- A high-performance harvester head ready for the challenge

The Eco Log 661 LF is a high-performance harvester head that offers the highest levels of quality, strength, and productivity in all types of final felling. In large-diameter final felling, the proportionally angled feed rollers, in combination with the patented LogHold system and Eco Log Saw Control, deliver the highest capacity and production. In final felling of low-grade timber, the versatile design comes into its own and ensures high levels of efficiency and rapid feeding.

The low friction concept (LF), combined with extremely well-protected, smart hose routing, paves the way for minimum friction, the least possible downtime, maximum uptime, and maximum productivity. In addition, the harvester head's variable roller motors generate an optimum balance between strength and speed in both low-grade and large-diameter stands.

The Eco Log 661 LF meets every challenge – flexibly, robustly, and efficiently.

Strong and versatile

PRODUCTIVE FINAL FELLING

With its world-class power, reliability and speed, the EC 661 LF ensures that productivity and profitability in final felling are optimized, whether you are working with spruce, pine or deciduous forest.

PEAK CAPACITY

The EC 661 LF reaches its absolute peak capacity with stems with a BHD ranging from 16–51 cm, although the LF concept means that it can also handle larger-diameter stems effectively.

Specifications

EC 661 LF

Feeding	
Proportional roller clamping pressure in relation to stem diameter, as well as individual setting by tree species for optimum performance.	
Roller motors:	750 cc
Roller motors, variable:	613–920 cc
Max. roller opening:	630 mm
Feed rate:	5 m/s / 4.1–6.1 m/s
Feed force:	28 kN / 34 kN
Proportional pressures:	Yes
Cutting	
SuperCut 150 is an extremely powerful unit with integrated chain lubrication and hydraulic tensioning of the chain. In combination with Eco Log Saw Control, the cutting time is optimized and the risk of cutting cracks is minimized.	
Cutting diameter, standard:	700 mm
Cutting diameter, option EC saw box:	810 mm
Chain speed:	40 m/s
Saw motor:	Bucher 32 cc
Saw unit:	Automatic – SuperCut 150
Saw Control:	Yes
Delimbing	
Delimbing knives with proportional pressure. Individual setting by tree species for optimum performance.	
Floating knives:	4
Fixed knives:	1
Delimbing diameter tip-tip:	480 mm
Delimbing diameter incl. lower knife:	510 mm
Min. limb diameter:	30 mm
Proportional pressures:	Yes
LogHold:	Yes

Weight and dimensions	
Despite its capacity to handle large-diameter trees, the EC 661 LF's compact dimensions mean that it is suitable for more than just large-diameter final felling.	
Width closed:	1360 mm
Width open:	1820 mm
Height, excl. tilt frame:	1730 mm
Weight, excl. rotator:	1480 kg
Weight with top saw, excl. rotator:	1595 kg
Recommendations	
Base machines	
The Eco Log 661 LF is ideal for installation on Eco Log's harvesters 580 & 590.	
Felling	
Proportional roller clamping pressure in relation to stem diameter, as well as individual setting by tree species for optimum performance.	
Recommended stem diameter (BHD) for maximum productivity*:	16–51 cm

* Breast height diameter, measured 1.3 m up the stem.

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Eco Log 761 LF

- When no job is too big

With its power, strength and outstanding capacity, the Eco Log 761 LF can take on the very heaviest jobs. Thanks to the proportional angling of the feed rollers, greater carrying capacity is generated the larger the stem that is being processed in this harvester head, which is designed according to the Low Friction concept (LF) for maximum productivity and profitability. Together with high traction and an extremely well protected, robust design, this results in an impressive combination ensuring maximum performance, reliability and efficiency in the very toughest final felling operations.

The Eco Log 761 LF handles the largest-diameter trees without any problems, but can also perform final felling of lower-grade timber quickly and efficiently, thanks to its compact dimensions in combination with Eco Log Saw Control. With the Eco Log 761 LF, you get a reliable, powerful harvester head with extraordinary capacity.

Powerful and reliable

FOR THE HEAVIEST JOBS

Strength, power and stability make the Eco Log 761 LF something very special, as the harvester head is able to handle even the heaviest and most demanding of jobs with full productivity and the highest levels of profitability.

PEAK CAPACITY

The EC 761 LF reaches its absolute peak capacity with stems with a BHD ranging from 20–56 cm, although the LF concept means that it can also handle larger-diameter stems effectively.

Specifications

EC 761 LF

Feeding	
Proportional roller clamping pressure in relation to stem diameter, as well as individual setting by tree species for optimum performance.	
Roller motors*:	934, 1043 cc
Max. roller opening:	700 mm
Feed rate:	4.5 m/s / 4.1 m/s
Feed force:	34 kN / 38 kN
Proportional pressures:	Yes
Cutting	
SuperCut 100 is an extremely powerful unit with integrated chain lubrication and hydraulic tensioning of the chain. In combination with Eco Log Saw Control, the cutting time is optimized and the risk of cutting cracks is minimized.	
Cutting diameter:	750 mm
Chain speed:	40 m/s
Saw motor:	Bucher 32 cc
Saw unit:	Automatic – SuperCut 100
Saw Control	Yes
Delimbing	
Proportional delimbing knife pressure in relation to stem diameter for minimum friction and maximum production. Individual setting of upper/lower knives and by tree species for optimum performance.	
Floating knives:	3
Fixed knives:	2
Delimbing diameter tip-tip:	510 mm
Delimbing diameter incl. lower knife:	550 mm
Min. limb diameter:	40 mm
Proportional pressures:	Yes
LogHold:	Yes

Weight and dimensions	
Despite its enormous capacity, the Eco Log 761 LF's compact dimensions mean that it is well suited to more than just the largest-diameter felling operations.	
Width closed:	1400 mm
Width open:	1920 mm
Height:	1850 mm
Weight:	1750 kg
Recommendations	
Base machines	
The EC 761 LF is installed on Eco Log's harvester 590.	
Felling	
Proportional roller clamping pressure in relation to stem diameter, as well as individual setting by tree species for optimum performance.	
Recommended stem diameter (BHD) for maximum productivity**:	20–56 cm

* Several alternative roller motors will be offered.
** Breast height diameter, measured 1.3 m up the stem.

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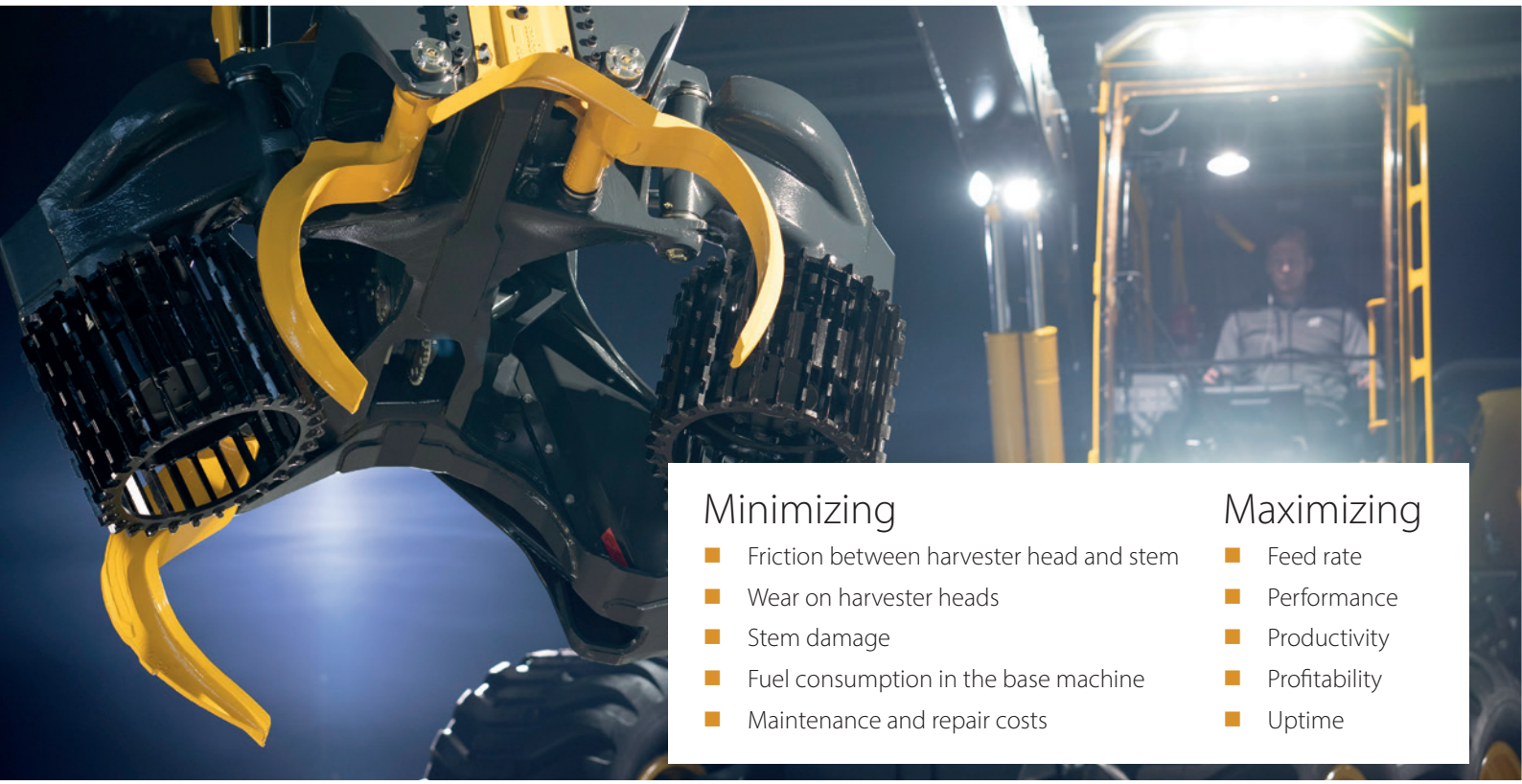
Eco Log Harvester Head



Minimizing

- Friction between harvester head and stem
- Wear on harvester heads
- Stem damage
- Fuel consumption in the base machine
- Maintenance and repair costs

Maximizing

- Feed rate
- Performance
- Productivity
- Profitability
- Uptime

The low friction concept

The low-friction concept consists of five different innovations and solutions, each of which has been carefully developed to achieve maximum production, optimum fuel and energy consumption as well as very low maintenance costs. Together, the five solutions result in an unbeatable combination that allows Eco Log to offer harvester heads with completely unique properties and benefits, which in turn maximize your profitability.

Five innovations for maximum efficiency:

The delimbing knives are equipped with long, specially designed knife edges, with the result that the limbs are cut off instead of being broken off. This minimizes friction during delimbing, increasing speed and productivity.

Proportional pressures ensure that the harvester head automatically always delivers optimum pressure for the delimbing knives and feed rollers against the stem, regardless of the stem diameter.

LogHold is a patented system and a development of proportional pressure, further minimizing friction. LogHold means that the delimbing knife pressure against the stem can be lowered even further without the risk of losing the stem.

Proportionally angled feed rollers mean that the angle and carrying capacity of the feed rollers are adjusted proportionally in relation to the stem diameter. When the feed rollers are fully open during the processing of very large-diameter stems, the feed rollers have the greatest angle and, as a result, deliver maximum carrying capacity in relation to the stem. This means that the pressure on the delimbing knives can be minimized, which in turn reduces friction and allows the harvester head to feed the stem through quickly and easily. When the feed rollers are closed, this unique solution provides an extremely narrow and versatile harvester head with compact dimensions.

Optimum hydraulics mean that pressure drops have been minimized through the dimensioning and design of hydraulic components, such as motors, valve assemblies, couplings and hoses. This generates high levels of energy-efficiency and the lowest possible fuel consumption per cubic meter harvested, where output, power and productivity are maximized during feeding, delimbing and cutting. Thanks to the fact that, according to the Low Friction concept, Eco Log's harvester heads only have two roller motors, the number of hoses, couplings and angles can be significantly reduced, which also entails minimal losses in the hydraulic system.

Reliability and quality

Here at Eco Log, our aim is to provide our customers with the best possible conditions and to offer first-class harvester heads with respect to performance and productivity as well as quality and reliability. For this reason, new components and materials are always carefully tested and analyzed before being approved, and we always do our utmost in everything from manufacturing and welding to assembly. We are proud to be able to offer high-quality harvester heads as part of our extensive and comprehensive range covering all aspects of forestry.

Eco Log Saw Control

Eco Log Saw Control is a patented system that ensures that you get the maximum performance from both your machine and your harvester head during every cut. The system continuously adapts the guide bar feed, and as a result each cut is optimized irrespective of tree species, stem diameter or how much power the machine is providing. This means that, even if you process a spruce with your first cut immediately followed by a birch, the saw adapts and delivers optimum guide bar pressure for the tree species in question, which also ensures that a high cutting speed is maintained throughout the operation. A high cutting speed not only reduces the risk of cutting cracks, but also generates considerable time savings and efficiency for your felling operation. Eco Log Saw Control maximizes your productivity during every cut.

The saw control optimizes each cut

AESawControl

Accessories and equipment

Our harvester heads have a wide range of accessories, making it possible to adapt the head to varying needs, machines and felling conditions.

	461 LF	561 LF	661 LF	761 LF
Colour marking	X	X	X	X
Used to facilitate forwarding when the assortment ranges are difficult to distinguish with the naked eye.				
Multi-tree handling	X	X		
Production-enhancing equipment for low-grade stands, where it is possible to fell and accumulate several stems and then process them at the same time.				
Root searching function		X	X	X
With the aid of a sensor mounted in the saw box, the harvester head automatically locates the end of the stem with the press of a button.				
Top saw			X	
Facilitates the felling of deciduous forest with a large number of forked trees, as well as felling stands with many broken tops.				
Saw box, V-shaped	X			
V-shaped bottom for deep snow				
Saw box, raised		X		
Raised 50 mm, providing more space and preventing snow compaction				
Saw box, extended			X	
Extended saw box for 90 cm guide bar (std 82 cm)				
Multi-rate feed			X	X*
Optimizes the harvester head's ratio between feed rate and feed force to ensure maximum productivity, regardless of stem diameter.				
Lighting, saw box	X	X	X	X
LED light in the saw box for additional illumination of the work area.				
Eucalyptus kit			X	X
Debarking kit for eucalyptus trees.				

*Upcoming

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